

GENERAL NOTES

1. LOT LINE & TOPOGRAPHIC INFORMATION FOR 6 MANITOU COURT TAKEN FROM ZONING MAP OF PROPERTY PREPARED BY DENNIS A. DEILUS LAND SURVEYORS DATED MARCH 16, 2020.

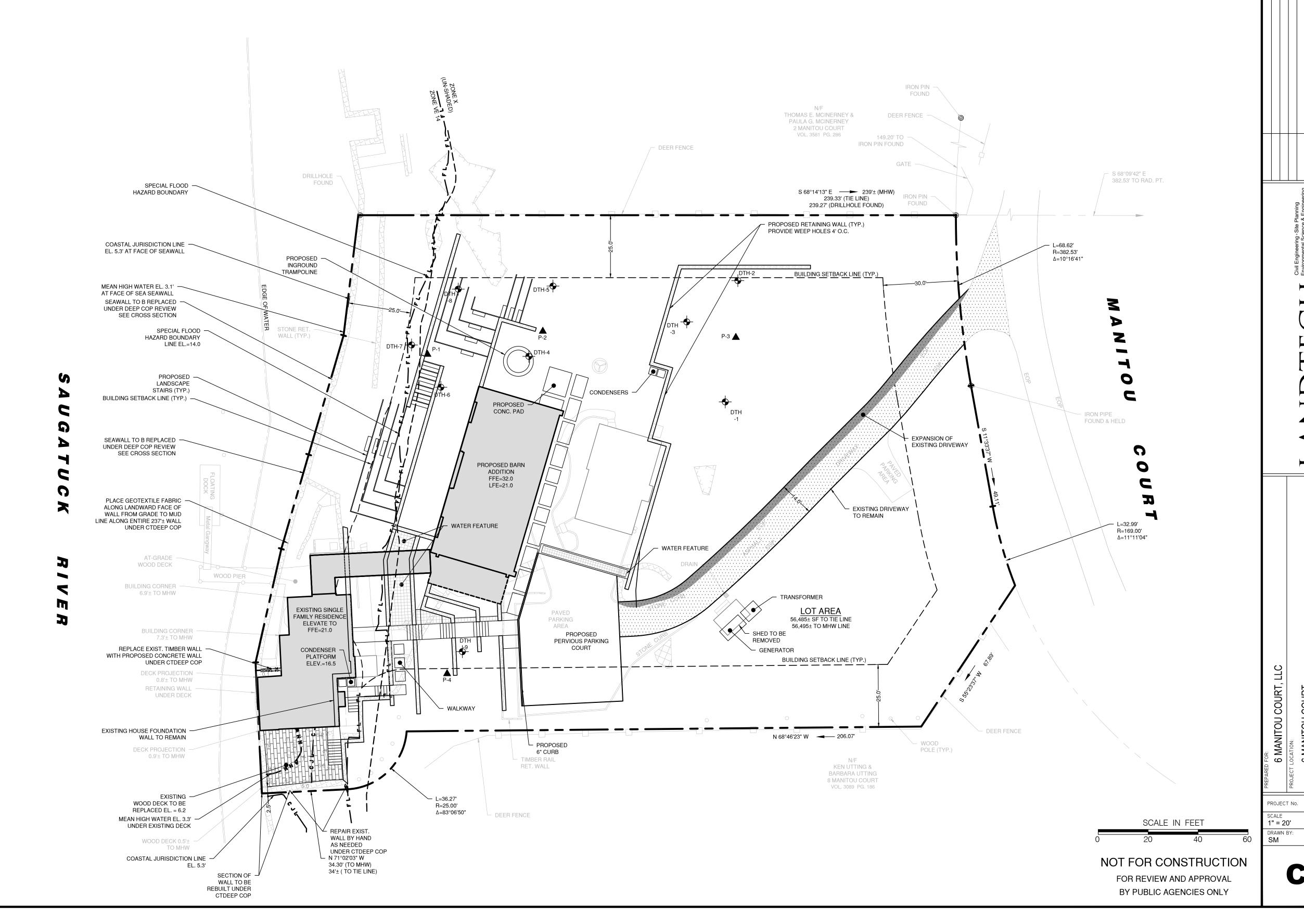
	C		
	COVERAGE CALCULAT	IONS	
	MANITOU COURT		
	ESIDENCE AAA		
	SITE AREA: 1.282 AC. S.F.		** 0 * 0 a B
1.	Total Lot Area (gross)		55,858 S.F.
2.	EASEMENTS, ACCESSWAY	0	
3.	ADD'L EXCLUSIVE SURFACE EASEMENTS	0	
4.	OTHER EXCLUSIVE SURFACE EASEMENTS	0	
5.	TOTAL OF EASEMENTS & ROADS		0 S.F.
	(SUM OF LINES $2,3 \& 4$ )		
6.	WETLAND AREAS	0 S.F.	
7.	EXSITING STEEP SLOPES > 25%	12,973 S.F.	
8.	PROPOSED STEEP SLOPES > 25%	7,050 S.F.	
9.	EXISTING TOTAL WETLAND & STEEP SLOPES		
	(SUM OF LINES 6 & 7)	12,973 S.F.	
10.	PROPOSED TOTAL WETLAND & STEEP SLOPES		
	(SUM OF LINES 6 & 7)	7,050 S.F.	
l 1.	EXISTING WETLAND/SLOPE REDUCTION	0.80 X LINE 8	10,378 S.F.
12.	PROPOSED WETLAND/SLOPE REDUCTION	0.80 X LINE 8	5,640 S.F.
13.	EXISTING DETERMINE BASE LOT AREA		
	(LINE 1 MINUS LINES 5 AND LINE 11)		46,480 S.F.
4.	PROPOSED DETERMINE BASE LOT AREA		
	(LINE 1 MINUS LINES 5 AND LINE 12)		50,218 S.F.
	DETERMINE MAXIMUM ALLOWABLE LOT AR	EA COVERAGE	
15.	EXISTING BASE LOT AREA X 25%	LINE 13 X 0.25	11,529 S.F.
6.	PROPOSED BASE LOT AREA X 25%	LINE 14 X 0.25	12,555 S.F.
	DETERMINE PROPOSED TOTAL AREA C	OVERAGE	,
7.	EXISTING TOTAL COVERAGE		
	EXISTING 2 STORY RESIDENCE	1,815 S.F.	
	EXISTING 1 STORY RESIDENCE	990 S.F.	
	EXISTING DRIVEWAY	6,133 S.F.	
	SHED, DOCK, DECK	1,167 S.F.	
18.	, , ,	JM OF LINE 17	10.105 S.F.
19.	PROPOSED TOTAL COVERAGE	SIM OF BRIEF	10,100 0.11
٠٠.	PROPOSED RESIDENCE	4,838 S.F.	
	PROPOSED DRIVEWAY	5,277 S.F.	
	PROPOSED DRIVEWAY PROPOSED WOOD DECK	5,277 S.F. 585 S.F.	
		575 S.F.	
20	DOCK, TRAMPOLINE, WATER FEATURE		11 275 6 5
20.	ALLOWABLE TOTAL COVERAGE (LINE 16)	SUM OF LINE 19 25.0%	11,275 S.F. 12,555 S.F.
16. 17.		25.0%	
	EXISTING TOTAL COVERAGE (LINE 18/LINE 13)		10,105 S.F.
18.	PROPOSED LOT COVERAGE (LINE 20 / LINE 14)	22.5%	11,275 s.f

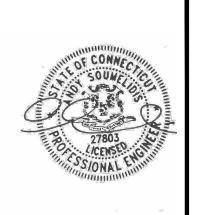
EXISTING SYMBOLS	: P	ROPOSED SYM	IBOLS:
O Iron Pin (Found)		(YD)	Storm Yard Drain
☐ Monument (Found	d)	● (MH)	Storm Drain Manhole
Manhole		<b></b> (CB)	Catch Basin
□ "CB" Catch Basir	1	(SSMH)	) Sanitary Sewer Manhole
Utility Pole		<b>▲</b> P-1	Perc Test Hole Location & Number
Light Pole  WG Water Gate		 ◆	Deep Test Hole Location & Number
GV Gas Valve		DTH-1	Proposed Well
Gas Meter			
W Existing Well			
EXISTING LINETYPES	S:	PROPOSED L	INETYPES:
	Property Line	—— s —	—— Sanitary Sewer
s	Sanitary Sewer Line	—— Е —	— Electric Service
E	U/G Elec. Line	w	—— Water Service
W	Water Line		—— U/G Telephone Service
O/H	Overhead Utilities		Electric/Telephone Service
тт	U/G Tele. Line		Primary Septic
E/T	U/G Electric/Telephone Line		Reserve Septic
	Wood/Chain Link Fence		Retaining Wa <b>ll</b>
	Stone Ret. Wall	20	Contour
— — — 20 — — — WF#4	Contour	20.1	< Spot Elevation € € € € € € € € € € € € € € € € € € €
WF#4 WF#4	Wetland Limit		
× 20.1	Spot Elevation		Wood/Chain Link Fence
	Watercourse Limit		Construction Fence
D D	Drainage Line	$\sim\sim$	✓ Vegetative Buffer
	Town/City Line 25 Year Flood Line	WF#3 WF	-
	100 Year Flood Line	W #34 W	#4 → Wetland Limit (Flagged)

— мну— мну— Mean High Water

— c J L— c J L— Coastal Jurisdiction Line

ZONING DATA  ZONING DISTRICT: RESIDENCE AAA DISTRICT  PROPOSED USE: SINGLE-FAMILY RESIDENCE											
						DIMENSION	IAL	REQUIRED/ALLOWED	EXISTING	PROVIDED	CONFORMS
						LOT AREA		87,120 SF (2.0 AC.)	55,858 SF (1.282 AC.)*	55,858 SF (1.282 AC.)*	N*
BASE LOT AREA	BASE LOT AREA		46,480 SF (1.067 AC.)	50,218 SF (1.153 AC.)							
TOTAL COVERAGE	MAX.	25% / 12,555 SF	21.9% / 10,105 SF	22.5% / 11,275 SF	Y						
SHAPE	MINIMUM	200' SQUARE	>200'	>200'	Y						
	FRONT	30'*	104.4'±	162.3'±	Y						
YARDS	SIDE	25'*	2.2'±**	2.5'±**	N**						
	REAR	25'*	0.0'**	0.0'±**	N**						
BUILDING HEIGHT BARN	MAXIMUM	3 STORIES 40'	N/A	3 STORIES 34.5'	Y						
BUILDING HEIGHT BOAT HOUSE	MAXIMUM	3 STORIES 40'	EXISTING	2 STORIES 33'	Y						
* Existing non-conforming lot a ** Existing non-conforming to s		•									





SINGLE

6 MANITOU COURT
WESTPORT, CT
PROPOSED SITE IMPROVEMENTS FC
AND RENOVATION - LAYOUT PLAN

20020-01

DATE 5/12/20

CHECKED BY:

**C-1** 

— с л ட— с л ட— Coastal Jurisdiction Line

#### GENERAL SEPTIC NOTES

- 1. THE PROPOSED SEPTIC SYSTEM IS TO BE CONSTRUCTED TO CONFORM TO THE LATEST REVISION OF THE STATE OF CONNECTICUT PUBLIC HEALTH CODE.
- 2. IT IS THE RESPONSIBILITY OF THE INSTALLER TO CALL "CALL BEFORE YOU DIG." 1-800-922-4455, TWO FULL WORKING DAYS PRIOR TO ANY EXCAVATION WORK ON THE
- 3. IT IS THE RESPONSIBILITY OF THE INSTALLER TO KEEP THE LOCAL HEALTH DEPARTMENT AND THE ENGINEER OF RECORD INFORMED OF CONSTRUCTION PROGRESS. NO DEVIATIONS FROM THE APPROVED DESIGN PLAN SHALL BE ALLOWED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER AND SANITARIAN. ENGINEER AND SANITARIAN WILL BE CONTACTED IF SOIL CONDITIONS OTHER THAN THOSE SHOWN ON PLAN ARE ENCOUNTERED AND WORK WILL BE HALTED PENDING REVIEW OF THOSE CONDITIONS.
- THE INSTALLATION OF THE SEPTIC SYSTEM SHALL BE UNDER THE SUPERVISION OF A
- 5. ELEVATIONS SHOWN REFER TO THE INVERT (FLOW LINE) OF THE PROPOSED LEACHING SYSTEM UNLESS NOTED OTHERWISE.
- BASED ON AN OBSERVED PERCOLATION RATE OF 1" IN 25 MINUTES AND A 5 BEDROOM DWELLING, A 1,500 GALLON SEPTIC TANK AND 1,000 SQ, FT, OF EFFECTIVE LEACHING AREA MUST BE PROVIDED AS PER THE STATE OF CONNECTICUT HEALTH CODE. INSTALL 60' OF ELJEN MANTIS DW-100 GALLERIES PROVIDING 1,200 SQ. FT. OF EFFECTIVE LEACHING AREA.
- 7. UTILIZATION OF EXISTING SEPTIC TANK WILL BE BASED UPON THE INTEGRITY OF THE TANK AND BAFFLES DETERMINED PRIOR TO LEACHING SYSTEM CONSTRUCTION.
- PROVIDE A 1,500 GALLON, TWO COMPARTMENT SEPTIC TANK MADE OF CONCRETE WITH A MINIMUM 4,000 PSI CONCRETE PER ASTM STANDARDS. SEPTIC TANK ACCESS SHALL BE OUTFITTED WITH 24" DIAMETER RISERS TO FINISHED GRADE WHERE SOIL COVER OVER THE TANK EXCEEDS 12 INCHES. SEAL ALL JOINTS WATERTIGHT. ALL TANK INLET AND OUTLET PIPING SHALL BE SEALED WITH A POLYETHYLENE GASKET, "POLYLOK" OR EQUIVALENT. TANK
- 9. SEPTIC TANK BAFFLES SHALL CONFORM TO TECHNICAL STANDARDS OF THE PUBLIC HEALTH
- 10. SEPTIC TANK SHALL HAVE AN APPROVED NON-BYPASS EFFLUENT FILTER AT THE OUTLET.
- 11. ALL PIPING BETWEEN HOUSE AND SEPTIC TANK SHALL BE FOUR INCHES IN DIAMETER WITH A MINIMUM SLOPE OF 1/4" PER FOOT OR SIX INCHES IN DIAMETER WITH A MINIMUM SLOPE OF 1/6" PER FOOT. PIPE SHALL BE LAID WITH TIGHT JOINTS AND IN A STRAIGHT LINE WITH UNIFORM GRADES. ACCESSIBLE MANHOLES OR SURFACE CLEANOUTS SHALL BE PROVIDED AT ONE OR MORE CUMULATIVE CHANGES OF DIRECTION EXCEEDING 45 DEGREES OR WHERE BUILDING SEWER EXCEEDS 75 FEET IN LENGTH. MATERIALS TO BE ALLOWED BY TECHNICAL
- 12. ALL PIPE USED BETWEEN SEPTIC TANK AND LEACHING AREA SHALL BE 4" SDR-35 PVC PIPE WITH WATERTIGHT JOINTS OR EQUIVALENT ALLOWED BY TECHNICAL STANDARDS. PIPE SHALL BE SET ON A MINIMUM SLOPE OF 1/8" PER FOOT.
- 13. DISTRIBUTION BOXES ARE TO BE SET ON A STABLE FOOTING OF 12" MINIMUM DEPTH OF 1" CRUSHED STONE.
- 14. ALL FILTER FABRIC SHALL BE 1.5 OZ./YD. (ASTM D-5261), PERMEABILITY OF 1.0/SEC. (AS TM D-4491) AND A TRAPEZOID TEAR OF 15 LBS. (ASTM D-4533) OR EQUIVALENT.
- 15. NO FOOTING DRAINS OR OTHER GROUNDWATER DRAINS SHALL BE INSTALLED WITHIN 25' OF PROPOSED SEPTIC SYSTEM OR WITHIN 50 FEET OF SEPTIC SYSTEM IF DRAIN IS DOWN
- PRIOR TO CONSTRUCTION ACTIVITIES THE LEACHING SYSTEM AREAS SHALL BE ROPED OFF OR OTHERWISE DELINEATED SO AS TO KEEP CONSTRUCTION TRAFFIC OFF THE SEPTIC
- STRIP AND STOCKPILE TOPSOIL AND REMOVE BOULDERS PRIOR TO PLACING FILL. ALL TOPSOIL MUST BE REMOVED IN FILL SYSTEMS.
- GRAVEL FILL TO BE DUMPED AT THE EDGE OF PREPARED LEACHING AREA AND PUSHED ONTO HARROWED SURFACE WITH TRACK MACHINE IN 12" (MAX) LIFTS. GRAVEL TO BE COMPACTED TO 90-95% STANDARDS PROCTOR DENSITY - ASTM D-698. THE ENGINEER OF RECORD AND THE HEALTH DEPARTMENT MUST APPROVE THE SELECT GRAVEL PRIOR TO ITS
- SELECT FILL SHALL BE COMPRISED OF CLEAN SAND, OR SAND AND GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. SELECT FILL SHALL MEET THE FOLLOWING
- A. THE SELECT FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THE 3 INCH SIEVE. UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED
- THE MATERIAL THAT PASSES THE #4 SIEVE IS TO BE REWEIGHED AND A SECOND SIEVE
- D. THE REMAINING SAMPLE SHALL MEET THE FOLLOWING GRADATION CRITERIA

SIEVE SIZE	PERCENT PASSING		
OILVE OIZE	WET SIEVE	DRY SIEVE	
#4	100	100	
#10	70-100	70-100	
#40	10-50*	10-75	
#100	0-20	0-5	
#200	0-5	0-2.5	

\*PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.

- 20. NON-SELECT FILL SHALL BE A CLEAN LOAM OR BETTER FREE OF ORGANIC MATTER.
- 21. THIS SYSTEM IS NOT DESIGNED FOR BACKWASH FROM A WATER SOFTENING SYSTEM OR THE OUTFLOW FROM A GARBAGE DISPOSAL OR TUB (BATHTUB, WHIRLPOOL, JACUZZI, ETC.) IN EXCESS OF 100 GALLONS.
- 22. MEASUREMENTS FOR AS-BUILT DRAWING TO BE COMPLETED BY PROFESSIONAL ENGINEER PRIOR TO BACKFILLING.
- 23. FINAL GRADING TO BE COMPLETED IMMEDIATELY AFTER INSPECTION AND COMPLETION OF MEASUREMENTS FOR AS-BUILT DRAWING.
- 24. THERE ARE NO WELLS WITHIN 75' OF PROPOSED SEPTIC SYSTEM.
- 25. THIS DESIGN CONFORMS TO APPLICABLE CODES AND ACCEPTED PRACTICE. NO OTHER WARRANTY IS EXPRESSED OR IMPLIED.
- 26. LAND-TECH CONSULTANTS, INC., ASSUMES NO RESPONSIBILITY FOR SEPTIC SYSTEM SITE PREPARATION, LOCATION OR INVERT ELEVATIONS IN COMPLIANCE WITH THE APPROVED PLAN, UNLESS IT SUPERVISES EACH PHASE OF SYSTEM INSTALLATION.
- BASED ON A VISUAL INSPECTION OF NEIGHBORING PROPERTIES AND A REVIEW OF AVAILABLE RECORDS, NO PART OF THE PROPOSED SEPTIC SYSTEM IS WITHIN THE REQUIRED SEPARATION DISTANCE FROM A WATER SUPPLY WELL, OR CLOSED LOOP GEOTHERMAL SYSTEM BOREHOLE/TRENCH AS DEFINED IN TABLE 1 OF THE "TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS", LATEST REVISION.

# SEPTIC SYSTEM DESIGN CALCULATIONS

# OF BEDROOMS = 5 PERCOLATION RATE = 1 INCH 20.1 - 30.00 MINUTES USED FOR DESIGN (OBSERVED PERCOLATION RATE OF 1" IN 25 MINUTES) SQUARE FEET OF LEACHING AREA REQUIRED = 1,000 SF

60 LF X 20.0 SF/LF = 1,200 SF OF LEACHING AREA PROVIDED

MLSS CALCULATION - PRIMARY

#### **HYDRAULIC FACTOR (HF):**

HYDRAULIC GRADIENT AT BOTH ENDS OF SYSTEM = (38.5 - 31.5) / 40 = 17.5%; (38.5 - 34) / 40 = 11.3% AVG. HYDRAULIC GRADIENT = (17.5 + 11.3) / 2 = 12.9% HYDRAULIC GRADIENT = 10.1-15.0%

AVERAGE DEPTH OF TEST HOLES WITHIN THE SYSTEM = DTH-1 = 38", DTH-2= 31" DEPTH OF DOWNGRADIENT TEST HOLE = DTH-3 = 27"

AVERAGE DEPTH OF RESTRICTIVE LAYER = (34.5 + 27) / 2 = 30.75"

FLOW FACTOR (FF): NUMBER OF BEDROOMS = 5

FF = 2.0

MLSS = 20 X 2.0 X 1.5

# PERCOLATION FACTOR (PF):

PERCOLATION RATE = 1" IN 20.1 - 30.0 MINUTES MLSS = HF X FF X PF

MLSS = 60 FEET PRIMARY LEACHING SYSTEM SPREAD = 60 FEET

# **INVERT ELEVATIONS**

HOUSE SEWER AT FOUNDATION = 30.0 MIN.

SEPTIC TANK INLET = 28.15OUTLET = 27.90 PUMP CHAMBER INLET = 27.80

OUTLET = 28.10 DISTRIBUTION BOX INLET = 41.15

LATERAL = 41.05ELJEN MANTIS DW-100 GALLERIES

BOTTOM = 40.00

# 1,500 GALLON PUMP CHAMBER

### **VOLUME & DOSING CALCULATIONS**

1,500 GALLON PRECAST CONCRETE PUMP CHAMBER AS MANUFACTURED BY EASTERN PRECAST CO. INC.

#### DESIGN FLOW = 600 GPD

PUMP CHAMBER VOLUME:

TANK INSIDE DIMENSIONS = 138.0" x 72.0" = 69.0 SF VOLUME OF 1" OF STORAGE = 43.0 GAL./INCH

#### PUMP DOSING VOLUME:

ELJEN MANTIS DW-100 DOSING VOLUME PER UNIT = 30.0 GAL. (PER MANUFACTURER GUIDELINES) 60 LF / 5 LF/UNIT = 12 UNITS

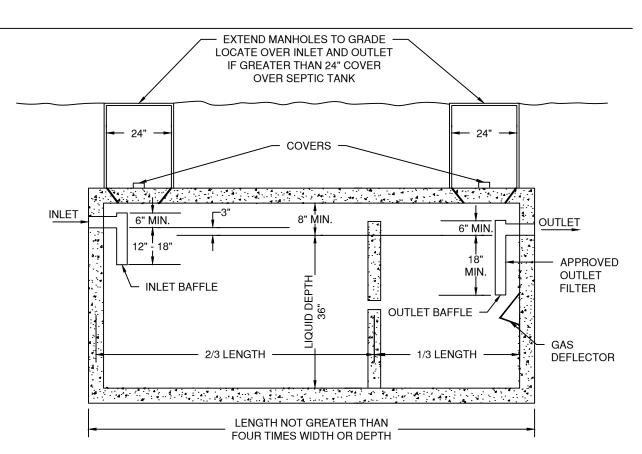
DOSING VOLUME = 12 UNITS x 30 GAL./UNIT = 360.0 GAL. 360.0 GAL. / 43.0 GAL./INCH = 8.4" SET DIFFERENTIAL BETWEEN "PUMP ON" AND "PUMP OFF" FLOATS AT 9.0"

PROVIDING 387.0 GALLONS PER PUMP CYCLE 600 GPD / 387.0 GAL./CYCLE = 1.6 CYCLES/DAY

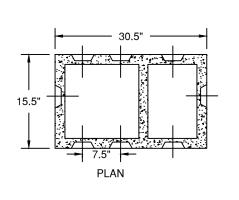
#### **EMERGENCY STORAGE VOLUME:**

DESIGN FLOW VOLUME = 600 GAL. 600 GAL. / 43.0 GAL./INCH = 14.0"

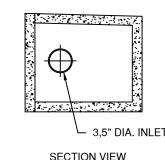
SET EMERGENCY "ALARM ON" FLOAT AT 14" BELOW INLET INVERT ELEVATION PROVIDING 600 GALLONS ABOVE ALARM LEVEL.

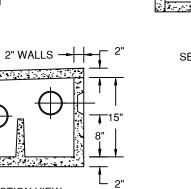


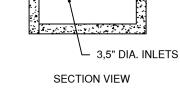
SEPTI	C TANK	DIMENSI	ONS		
CAPACITY (GALLONS)	LENGTH	WIDTH	HEIGHT		
1,000	9'2"	4'4"	5'		
1,250	10'	5'	5'4"		
1,500	11'6"	6'	4'9"		
2,000	11'6"	6'	6'		
2,500	11'6"	6'	7'		

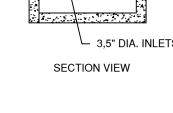


5, 5" DIA. OUTLETS -

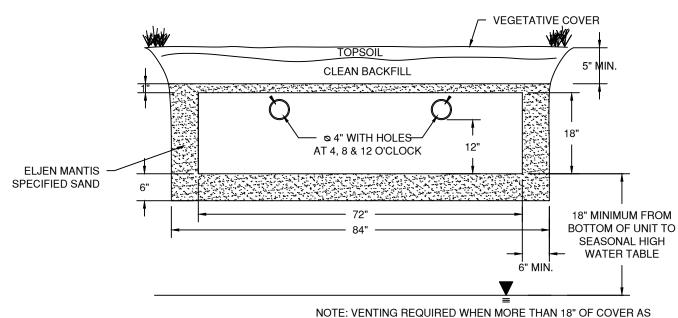








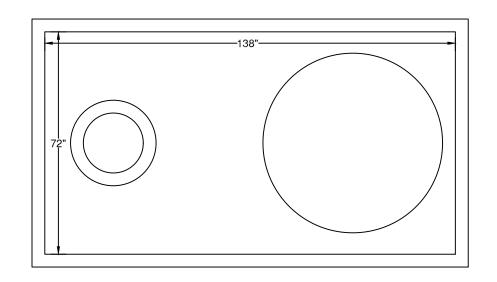
SECTION VIEW



ELJEN MANTIS DW-100 TYPICAL CROSS SECTION

MEASURED FROM THE TOP OF THE UNIT TO FINISHED GRADE

**DISTRIBUTION BOX WITH BAFFLE** 



PLAN

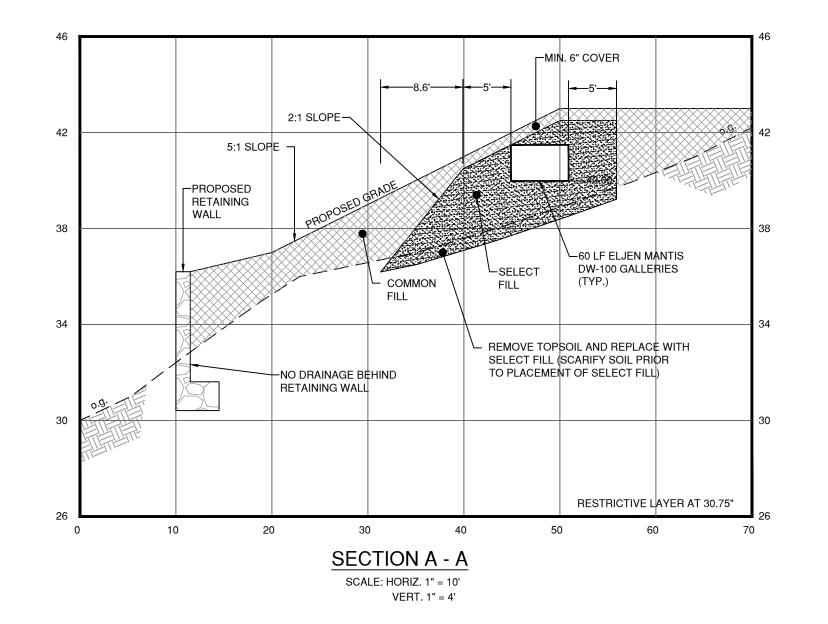
- ELECTRICAL SECURE LIFTING CHAIN TO MANHOLE EXTEND MANHOLE TO GRADE (24" DIAMETER MINIMUM) THREADED PLUG PRESSURE-TREATED -- QUICK-CONNECT COUPLER TIMBER POST OR EQUIV. WEEP HOLE ELECTRIC CONDUIT TO SOURCE FINISHED GRADE 2" DIA. PVC (ASTM 2239) FORCE MAIN WITH SOLVENT WELD JOINTS (OR EQUAL) - CHECK VALVE IF REQUIRED GATE VALVE 600.0 GALLONS EMERGENCY -STORAGE ABOVE ALARM ON ALARM ON —— PUMP ON —— PUMP OFF -GOULDS PUMP MODEL -#WE0311L OR EQUIV.

> **GENERAL NOTES:** SET FLOATS TO PUMP 387.0 GALLONS PER CYCLE. 2. PUMP CHAMBER SHALL BE PRECAST CONCRETE AS MANUFACTURED BY EASTERN PRECAST CO. INC. OR APPROVED EQUAL.

CONCRETE BLOCK -

1,500 GALLON PUMP CHAMBER

**SECTION** 



TEST HOLE DATA SOIL TESTS CONDUCTED ON FEBRUARY 14, 2020 TEST HOLE 1

TEST HOLE 2 0 - 3" BROWN SILTY FINE SAND 3 - 36" ROOTS TO 28" NO MOTTLING, GROUNDWATER AT 31", LEDGE AT 36" **RESTRICTIVE LAYER AT 31"** 

TOPSOIL

ROOTS TO 28"

BROWN SILTY FINE SAND

RESTRICTIVE LAYER AT 38"

TEST HOLE 3 0 - 4" TOPSOIL

BROWN SILTY FINE SAND NO MOTTLING, GROUNDWATER AT 27", LEDGE AT 29" **RESTRICTIVE LAYER AT 27"** 

NO MOTTLING, NO GROUNDWATER, LEDGE AT 42"

NO MOTTLING, GROUNDWATER AT 38", LEDGE AT 50"

TEST HOLE 4

BROWN SILTY FINE SAND ROOTS TO 11" NO MOTTLING, NO GROUNDWATER, LEDGE AT 20" RESTRICTIVE LAYER AT 20"

TEST HOLE 5

0 - 8" TOPSOIL BROWN SILTY FINE SAND BOOTS TO 13"

RESTRICTIVE LAYER AT 42"

TEST HOLE 6

0 - 9" TOPSOIL BROWN SILTY FINE SAND BOOTS TO 27" NO MOTTLING, NO GROUNDWATER, LEDGE AT 30"

RESTRICTIVE LAYER AT 30"

TEST HOLE 7

TOPSOIL BROWN SILTY FINE SAND BOOTS TO 33" NO MOTTLING, NO GROUNDWATER, LEDGE AT 41"

RESTRICTIVE LAYER AT 41"

TEST HOLE 8

BROWN SILTY FINE SAND ROOTS TO 12" NO MOTTLING, NO GROUNDWATER, LEDGE AT 20"

RESTRICTIVE LAYER AT 20"

TEST HOLE 9

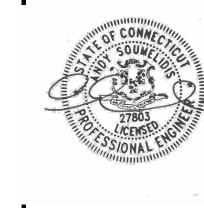
0 - 10" TOPSOIL BROWN SILTY FINE SAND ROOTS TO 21" NO MOTTLING, NO LEDGE, GROUNDWATER AT 22" RESTRICTIVE LAYER AT 22"

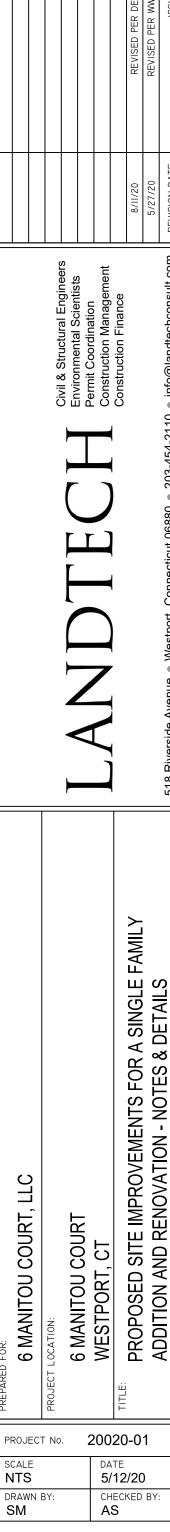
PERCOLATION TEST DATA

FLHCOLATIC	M ILSI DATA			
Perc Hole	P.1		Date:	2/14/202
Depth:	24 i	in.	Presoak:	60min
Time	Depth	Drop	Interval	Rat
	(in.)	(in.)	(min.)	(min./in
10:50	5.50	,	, ,	`
11:00	7.00	1.50	00:10	6.6
11:10	8.50	1.50	00:10	6.6
11:20		1.00	00:10	10.0
11:30		0.50	00:10	20.0
11:40		0.50	00:10	20.0
11:50		0.50	00:10	20.0
Final Rate:	1" in	20.00	minutes	
Perc Hole	P.2		Date:	2/14/202
Depth:	24 i	in.	Presoak:	60min
Time	Depth	Drop	Interval	Rat
	(in.)	(in.)	(min.)	(min./in
10:51	7.00			
11:01	8.00	1.00	00:10	10.0
11:11	8.50	0.50	00:10	20.0
11:21	9.50	1.00	00:10	10.0
11:31	9.75	0.25	00:10	40.0
11:41	10.00	0.25	00:10	40.0
11:51	10.25	0.25	00:10	40.0
Final Rate:	1" in	40.00	minutes	
Perc Hole	P.3		Date:	2/14/202
Depth:	24 i	in.	Presoak:	60 min
Time	Depth	Drop	Interval	
	(in.)	(in.)	(min.)	(min./in
10:53	3.50			
11:03		4.50	00:10	2.2
11:13		4.00	00:10	2.5
11:23		2.25	00:10	4.4
11:33		1.00	00:10	10.0
11:43		0.50	00:10	20.0
11:53	16.15	0.40	00:10	25.0
Final Rate:	1" in	25.00	minutes	

1" in 25.00 minutes 2/14/2020 (in.) (min.) (min./in.) 10:55 11:05 11:15 15.00 2.86 3.50 00:10 11:25 17.75 2.75 00:10 3.64 11:35 19.50 1.75 00:10 11:45 21.00 1.50 00:10 6.67 22.00 1.00 00:10 11:55 1" in 10.00 minutes

> NOT FOR CONSTRUCTION FOR REVIEW AND APPROVAL BY PUBLIC AGENCIES ONLY





#### GENERAL EROSION AND SEDIMENT CONTROL NOTES LAND DISTURBANCE WILL BE KEPT TO A MINIMUM; RESTABILIZATION WILL BE SCHEDULED AS SOON AS POSSIBLE. SILT FENCE WILL BE INSTALLED ALONG THE TOE OF ALL CRITICAL CUT AND FILL SLOPES, SOIL STOCKPILE AREAS, AND IN THOSE AREAS SHOWN ON THE PLAN. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE STATE OF CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL. 2002. EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED PRIOR TO LAND DISTURBANCE WHENEVER POSSIBLE ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE PROPERLY MAINTAINED UNTIL STABILIZATION HAS BEEN ACHIEVED. ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING THE CONSTRUCTION PERIOD IF NECESSARY OR REQUIRED. A MINIMUM OF 50 FEET OF SILT FENCE SHALL BE STORED AT THE SITE FOR EMERGENCY USE. ANY EXCAVATIONS THAT MUST BE DEWATERED WILL BE PUMPED INTO AN ACTIVE DRAINAGE SYSTEM OR DISPERSED IN AN UNDISTURBED FIELD AREA. THE INLETS OF ALL PUMPS ARE TO BE FLOATED A MINIMUM OF 24 INCHES OFF THE BOTTOM OF THE EXCAVATION. PREVENT WIND GENERATED SEDIMENTS AND DUST. DEBRIS AND OTHER WASTES RESULTING FROM EQUIPMENT MAINTENANCE AND

- WATER AND CALCIUM CHLORIDE SHALL BE APPLIED TO UNPAVED ACCESSWAYS TO
- CONSTRUCTION ACTIVITIES WILL NOT BE DISCARDED ON-SITE.
- 10. SEDIMENT REMOVED FROM CONTROL STRUCTURES WILL BE DISPOSED OF IN A MANNER WHICH IS CONSISTENT WITH INTENT OF THE PLAN. 11. SILT FENCES SHALL HAVE SEDIMENT REMOVED WHEN THE DEPTH OF THE
- SEDIMENT IS EQUAL TO 1/3 TO 1/2 THE HEIGHT OF THE FENCE. FENCES SHALL BE PROPERLY INSTALLED AND RIPPED FENCE OR BROKEN POSTS REPAIRED AS SOON
- SPACES ARE FULL OR STRUCTURES ARE BREACHED, AS APPLICABLE. 13. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND THE SOIL

ANTI-TRACKING PADS AND GRAVEL CHECK DAMS SHALL BE REPLACED WHEN VOID

SURFACE STABILIZED WHEN CONSTRUCTION IS COMPLETE AND THE SOIL SURFACES ARE PERMANENTLY STABILIZED. STRUCTURAL COMPONENTS SHALL BE CLEANED OF ALL SEDIMENT UPON COMPLETION OF CONSTRUCTION. 14. THE OWNER IS ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES INSTALLATION AND

CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, NOTIFYING THE PLANNING AND ZONING COMMISSION OF ANY TRANSFER OF THIS

RESPONSIBILITY, AND FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT

MAINTENANCE OF CONTROL MEASURES. INFORMING ALL PARTIES ENGAGED ON THE

#### **EXCAVATION/FILL NOTES**

- 1. NO PROCESSING OF EARTH OF ANY KIND SHALL BE CONDUCTED ON THE SITE EXCEPT FOR MATERIAL THAT IS EXCAVATED DIRECTLY FROM THE PROJECT SITE FOR USE ON THE PROJECT SITE.
- 2. THERE SHALL BE NO SHARP DECLIVITIES, PITS OR DEPRESSIONS.

PLAN IF AND WHEN THE TITLE OF LAND IS TRANSFERRED.

- 3. PROPER SURFACE DRAINAGE SHALL BE PROVIDED AND GROUNDWATER SHALL NOT BE POLLUTED. 4. AFTER EXCAVATION OR FILLING, THE PREMISES SHALL BE CLEARED OF DEBRIS AND TEMPORARY STRUCTURES WITHIN THE TIME PROVIDED IN THE PERMIT.
- 5. FILL MATERIAL SHALL NOT INCLUDE ORGANIC (FOR EXAMPLE TREE STUMPS, LEAVES, BRUSH OR OTHER MATERIALS THAT DECOMPOSE, ETC.) OR PETROLEUM BASED PRODUCTS OR MATERIALS.
- 6. THERE SHALL BE NO EXCAVATION/FILL WITHIN 5' OF A LOT LINE.
- 7. THERE SHALL BE NO PROPOSED SLOPES GREATER THAN 1:5 (20%).
- 8. THERE SHALL BE NO EXCAVATION/FILL GREATER THAN 10' IN HEIGHT. 9. MAXIMUM CUT/FILL:

#### BASE LOT AREA (SQUARE FEET) X 50% OF THE ALLOWABLE TOTAL COVERAGE PERCENTAGE IN RESPECTIVE ZONE X 10' DIVIDED BY 27 CUBIC FEET =

56,495 SF X (0.5 X 25%) X 10 / 27 = 2615.5 CY

PROPOSED FILL: 1,400 CY PROPOSED CUT: 100 CY TOTAL EARTHWORK: 1,500 CY << 2,615.5 CY

#### **CONSTRUCTION SEQUENCE**

#### CONSTRUCTION WILL TAKE 12-18 MONTHS TO COMPLETE

PRIOR TO START OF CONSTRUCTION, CONTRACTOR TO INSTALL CONSTRUCTION ENTRANCE AT THE ROADWAY, EROSION AND SEDIMENT CONTROLS (REGARDLESS OF PHASE) AND TURBIDITY CURTAIN ALONG FACE OF SEAWALL. CONTRACTOR TO INSTALL JOB TRAILER AND

2. CUT DOWN ALL TREES LABELED TO BE REMOVED. DO NOT STUMP UNTIL THAT PHASE OF CONSTRUCTION IS UNDERWAY.

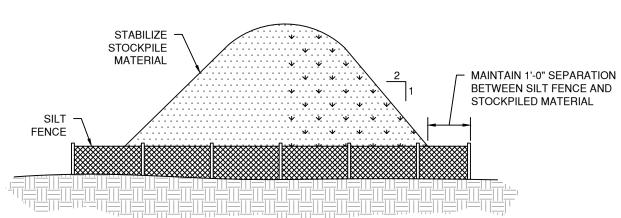
3. SHUT OFF ALL UTILITIES AND ABANDON SEPTIC SYSTEM PER THE CT PUBLIC HEALTH CODE.

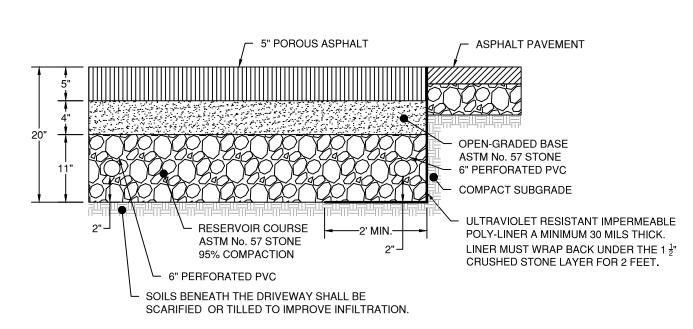
# PHASE I (3 MONTHS)

- 1. ENSURE ALL SILT FENCE AND HAYBALES ARE INSTALLED PROPERLY.
- 2. INSTALL CONSTRUCTION ANTI-TRACKING PAD DOWN TO THE RIVER. 3. DEMOLISH GARAGE, PORTION OF ASPHALT, AND STUMP TRESS (6 TOTAL).
- 4. INSTALLATION OF TEMPORARY UTILITIES. 5. SELECTIVE DEMO ON BOATHOUSE AND DECK.
- 6. DURING LOW TIDE, EXCAVATE DOWN TO LEDGE FOR THE CRIBBING FOOTINGS. 7. EXCAVATE, IN 20' SECTIONS, BEHIND EXISTING SEAWALL TO INSTALL FILTER FABRIC.
- 8. INSTALL CRIBBING AND ELEVATE THE EXISTING BOATHOUSE.
- 9. DEMOLISH EXISTING FOUNDATIONS AND PIERS.
- 10. EXCAVATE FOR BARN ADDITION FOUNDATIONS. 11. DURING LOW TIDE, EXCAVATE FOR HOUSE, DECK AND WALL FOUNDATIONS.
- 12. DURING LOW TIDE, FORM AND POUR CONCRETE FOOTINGS. 13. BACKFILL AROUND FOOTINGS AND CONSTRUCT MASONRY PIERS AND WALL.
- 14. SET HOUSE ON NEW PIER FOUNDATIONS AND REMOVE CRIBBING.
- 15. FORM AND POUR BARN FOUNDATIONS. 16. BACKFILL AROUND FOUNDATIONS.
- 17. REMOVE ANY EXCESS SOIL MATERIAL FROM STOCKPILE AREA. 18. STABILIZE DISTURBED STEEP SLOPES WITH LANDSCAPING OR TEMPORARY EROSION
- BLANKETS. 19. CONTINUE WITH FRAMING AND REMAINDER OF HOUSE CONSTRUCTION.

# 20. CONSTRUCT DECK WITH ACCESS TO DRAINAGE BELOW.

- PHASE II (2 MONTHS) 1. ENSURE ALL SILT FENCE AND HAYBALES ARE INSTALLED PROPERLY.
- 2. STUMP TREES (5 TOTAL). 3. INSTALL TRENCH DRAIN AND DRAINAGE PIPING. 4. EXCAVATE FOR RETAINING WALL FOOTINGS.
- 5. FORM AND POUR FOOTINGS. 6. FORM AND POUR RETAINING WALLS.
- . BACKFILL BEHIND RETAINING WALLS.
- 8. FORM AND POUR STAIRS.
- 9. STABILIZE DISTURBED STEEP SLOPES WITH LANDSCAPING OR TEMPORARY EROSION





NOTES

1. STONE RESERVOIR COURSE THICKNESS VARIES.

CONNECTOR

PHASE III (2 MONTHS)

2. STUMP TREES (6 TOTAL).

7. INSTALL SEPTIC SYSTEM.

PHASE IV (2 MONTHS)

8. FORM AND POUR STAIRS.

PHASE V (1 MONTH)

4. FORM AND POUR FOOTINGS.

5. FORM AND POUR RETAINING WALLS.

6. BACKFILL BEHIND RETAINING WALLS.

TEMPORARY EROSION BLANKETS.

6. FORM AND POUR RETAINING WALLS.

7. BACKFILL BEHIND RETAINING WALLS

TEMPORARY EROSION BLANKETS.

2. REMOVE ASPHALT AND STUMP TREE (1 TOTAL).

6. EXPAND THE EXISTING DRIVEWAY ±2' WIDER.

EROSION CONTROL MEASURES CAN BE REMOVED.

7. FINALIZE UTILITY CONNECTIONS.

5. FINALIZE CONSTRUCTION OF PERVIOUS DRIVEWAY.

8. FINALIZE ENTIRE LANDSCAPING AND STABILIZE SITE.

3. EXCAVATE FOR RETAINING WALL FOOTINGS.

I. ENSURE ALL SILT FENCE AND HAYBALES ARE INSTALLED PROPERLY.

8. BACKFILL AREA WITH CLEAN FILL MATERIAL. (APPROXIMATELY 50 DUMP

9. STABILIZE DISTURBED STEEP SLOPES WITH LANDSCAPING OR

9. STABILIZE DISTURBED STEEP SLOPES WITH LANDSCAPING OR

1. ENSURE ALL SILT FENCE AND HAYBALES ARE INSTALLED PROPERLY.

4. INSTALL DRAINAGE PIPING ON SOUTHERN PORTION OF PROPERTY.

3. INSTALL DRAINAGE STONE AND PIPING BENEATH PERVIOUS DRIVEWAY.

ONCE FINAL LANDSCAPING IS INSTALLED, ESTABLISHED AND STABILIZED,

### POROUS ASPHALT DRIVEWAY TYPICAL CROSS SECTION

- BALLAST CHAIN

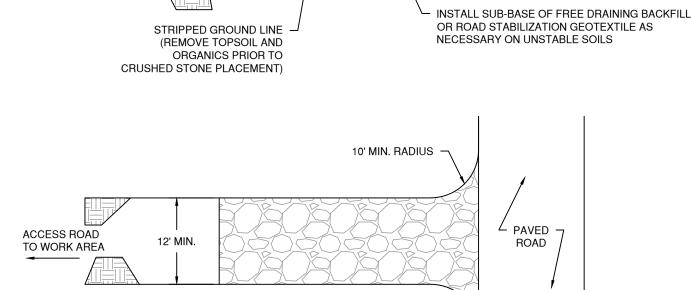
EXTRA FLOTATION TO -COMPENSATE FOR WEIGHT HANDHOLD FLOTATION OF END CONNECTOR **FREEBOARD** SEGMENT BUOYANCY WATERLINE DESIGN WATERLINE TENSION -TENSION CABLE SKIRT BALLAST CHAIN -

GRADATION SHALL BE DOT

No. 3 OR ASTM C-33 No. 3

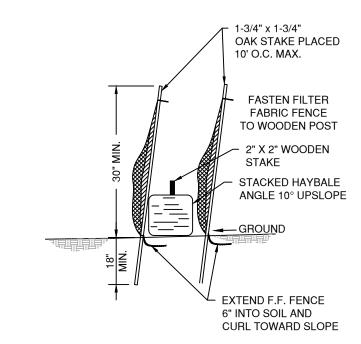
→ ACCESS →

# TURBIDITY CURTAIN/BOOM (TYPICAL)



- 100' LENGTH -

# CONSTRUCTION ENTRANCE/ANTI-TRACKING PAD



3. UNROLL AND LAY BLANKET OUT DOWN -

SLOPE FACE (IN DIRECTION OF FLOW).

ANCHOR AT LEAST 5 FEET BACK FROM TOP

1. GRADE, SMOOTH, AND COMPACT SLOPE.

BLANKET FROM LAYING FLUSH WITH THE

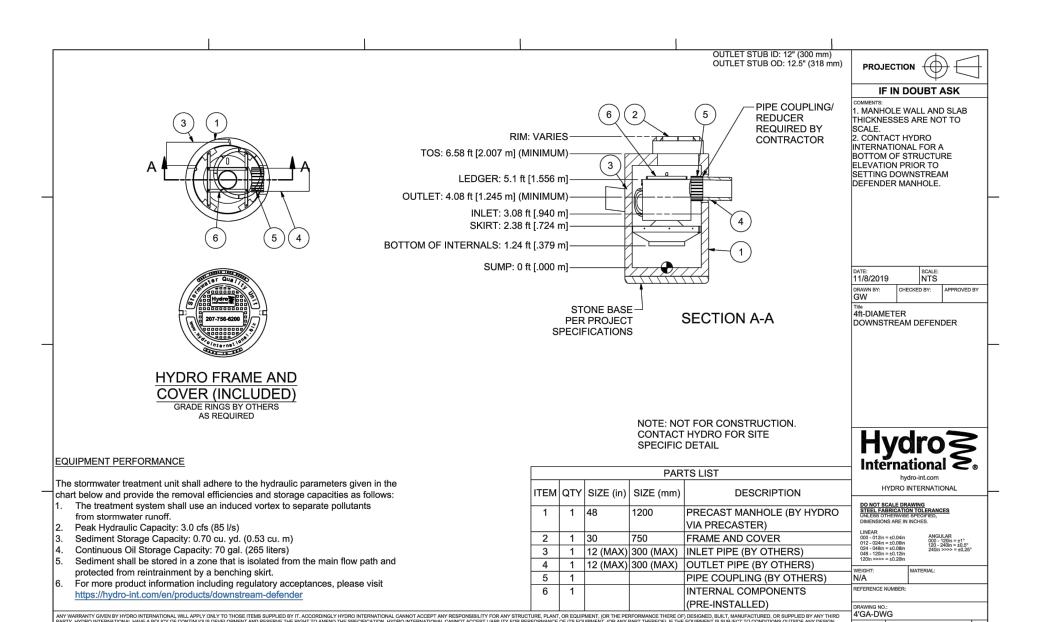
GROUND. DO NOT TRACK SLOPE FACE.

REMOVE ROCKS, TRASH, AND OTHER

MATERIAL WHICH WILL PREVENT THE

OF SLOPE. DO NOT STRETCH BLANKET.

DOUBLE SILT FENCE W/ HAY BALES



STAKE AT 36" TO

60" INTERVALS

WITH GROUND

FASTENERS (SEE

6" DEEP X 6" WIDE TRANSVERSE TRENCH -

AT 50 FT. INTERVALS (UP SLOPE FACE)

WOOD STAKES 1" X 3"

TRIANGULAR SHAPE

12" TO 18"

FASTENER

TYPICAL GROUND FASTENERS

BACKFILL WITH

SECTION A-A

**EROSION STOP (CHECK SLOT) DETAIL** 

SOIL AND TAMP

STOCK CUT INTO

2. FERTILIZE AND SEED.

**EROSION STOP (CHECK SLOT)** 

DOUBLE ROW OF FASTENERS AT EROSION -

IF WEATHER PERMITS SEEDING, EROSION-CONTROL FOR STEEP SLOPE RESTORATION BLANKET IS TO BE BIODEGRADABLE COCONUT FIBER USE TURF REINFORCEMENT MAT

AMERICAN GREEN, INC., OR EQUIVALENT. IF SEEDING

MUST BE DELAYED, EROSION-CONTROL BLANKET IS

TO BE "GEOCOIR DeKoWe 400" AS MANUFACTURED BY BELTON INDUSTRIES, OR EQUIVALENT.

TURF REINFORCEMENT MAT IS TO BE "GEOCOIR

DeKoWe 700" AS MANUFACTURED BY BELTON

INDUSTRIES, OR EQUIVALENT.

BLANKET "SC150BN" AS MANUFACTURED BY NORTH (GEOCOIR DeKoWe 700 OR EQUIVALENT)

EROSION CONTROL BLANKET INSTALLATION ON SLOPE

STOP. EACH FASTENER ON 12" CENTER

MULCH WITH 1 OF STRAW UNDER BLANKET

BLANKET

4. SECURE BLANKET WITH WOOD OR METAL FASTENERS -

1-1/2" SQUARE

HARDWOOD STAKE

PLACED 10' O.C. MAX.

FABRIC FASTENED TO STAKE

- BURY END OF

GEOTEXTILE SILT FENCE

FILTER FABRIC

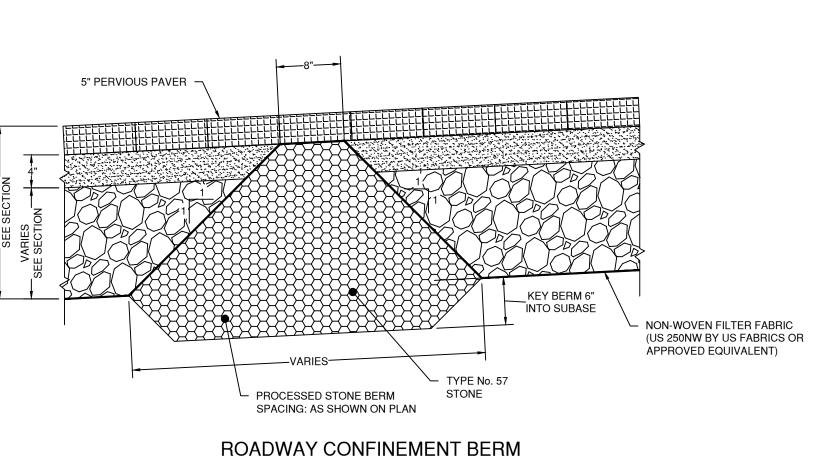
ANGLE 10° UPSLOPE

GROUNE

OVERLAP BLANKET ENDS 6", UPPER BLANKET -

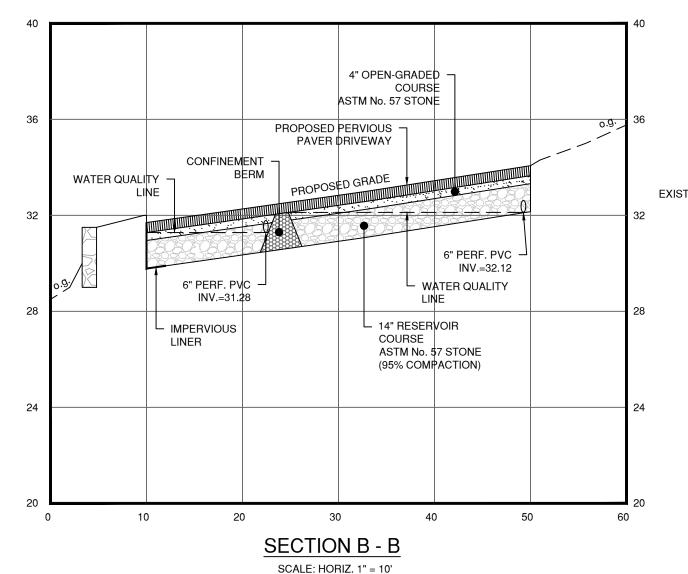
OVER LOWER BLANKETAND ANCHOR.

- OVERLAP EDGES BY

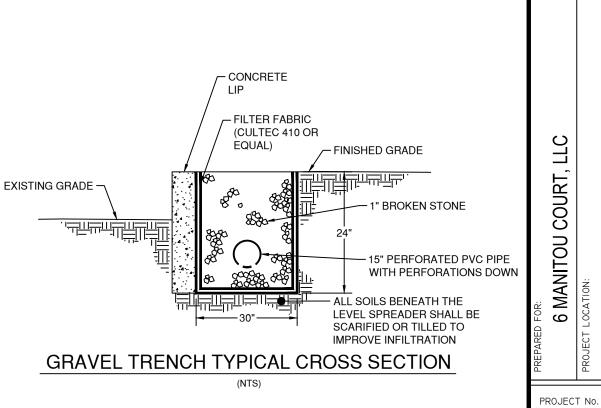


VIEW A-A

PAVED ROAD



VERT. 1" = 4"



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A SINGLE DETAILS

IMPROVEMENTS FOR A ENOVATION - NOTES & [

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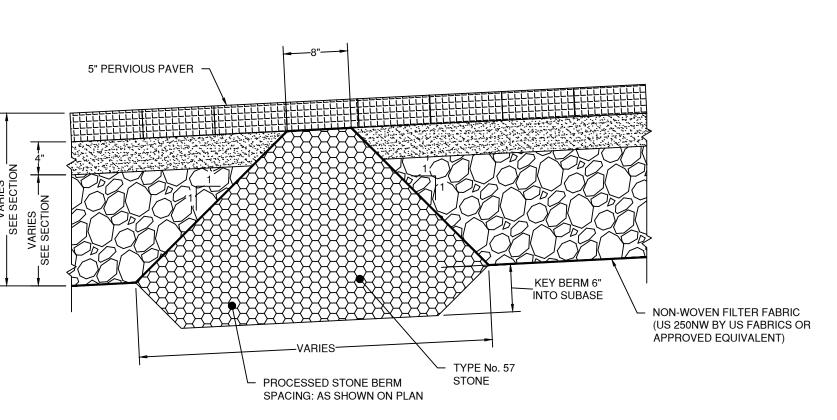
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5/12/20

CHECKED BY





STOCKPILE DETAIL